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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

FERGUSON, MICHAEL P

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 01/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/729,743

Applicant(s)

BRIDGERS, STEVEN B.

Examiner

Michael P. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-88 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19-88 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Objections

1. Claim 53 is objected to because of the following informalities:

Claim 53 (line 1) recites "A connector module as recited in claim 38". It appears the applicant intended to recite --A connector module as recited in claim 39--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 24 and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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4. Claim 24 recites the limitation "said second connector module" in line 2.

There is insufficient antecedent basis for this limitation in the claim, as a "second connector module" has not been previously mentioned.

5. Claim 43 recites the limitation "said second connector module" in line 2.

There is insufficient antecedent basis for this limitation in the claim, as a "second connector module" has not been previously mentioned.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 19-21, 25, 34, 35, 38-40, 44, 48, 49, 58, 59, 64-66, 70, 71, 74, 75,

80 and 83-88 are rejected under 35 U.S.C. 102(b) as being anticipated by

Eppenbach (USPN 5,590,674).

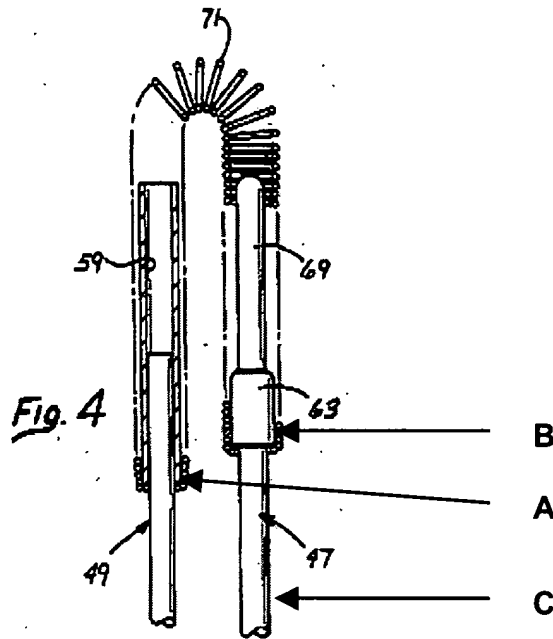
As to claim 19, Eppenbach discloses a connector module having:

a body **57**;

a resilient member **71** accommodating translational (compression of spring **71**) and rotational motion (bending of spring **71**) in more than one plane, the resilient member having a first end **A** connected to the body and a second end **B**;

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a strut **47,63,69**, the strut having a first end **63,69** connected to the second end of the resilient member and a second end **C** for connection to another structural element (an identical connector module having a body **57**; Figures 2-5).



As to claim 20, Eppenbach discloses a connector module wherein another structural element comprises a second connector module (Figures 3 and 4).

As to claim 21, Eppenbach discloses a connector module wherein another structural element has a second strut (attached to a body **57** of the another structural element; Figures 3 and 4).

As to claim 25, Eppenbach discloses a connector module having a strut **47,63,69** having a telescoping member **69** (telescoping member **69** is telescopically received within cavity **59** of body **57**; Figures 3 and 4).

As to claim 34, Eppenbach discloses a connector module having a resilient member **71** providing a degree of motion permitting a strut **47,63,69** to

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move between a position in a first plane and a position in a second plane (Figures 3 and 4).

As to claim 35, Eppenbach discloses a connector module having a strut **47,63,69** having a telescoping member **69** (telescoping member **69** is telescopically received in cavity **59** of body **57**; Figures 3 and 4).

As to claim 38, Eppenbach discloses a connector module having a resilient member **71** accommodating axial motion (Figures 4).

As to claim 39, Eppenbach discloses a connector module wherein another structural element comprises a second the connector module (Figures 3 and 4).

As to claim 40, Eppenbach discloses a connector module wherein another structural element has a second strut (attached to a body **57** of the another structural element; Figures 3 and 4).

As to claim 44, Eppenbach discloses a connector module having a strut **47,63,69** having a telescoping member **69** (telescoping member **69** is telescopically received in cavity **59** of body **57**; Figures 3 and 4).

As to claim 48, Eppenbach discloses a connector module having a resilient member **71** providing a degree of motion permitting a strut **47,63,69** to move between a position in a first plane and a position in a second plane (Figures 3 and 4).

As to claim 49, Eppenbach discloses a connector module having a strut **47,63,69** having a telescoping member **69** (telescoping member **69** is telescopically received in cavity **59** of body **57**; Figures 3 and 4).

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As to claim 58, Eppenbach discloses a structure comprising a plurality of connector modules, each the connector module comprising;

a body **57**;

a resilient member **71** accommodating translational (compression of spring **71**) and rotational motion (bending of spring **71**) in more than one plane, the resilient member having a first end **A** connected to the body and a second end **B**;

a strut **47,63,69**, the strut having a first end **63,69** connected to the second end of the resilient member and a second end **C** for connection to another structural element (Figures 2-5).

As to claim 59, Eppenbach discloses a structure having a strut **47,63,69** having a telescoping member **69** (telescoping member **69** is telescopically received in cavity **59** of body **57**; Figures 3 and 4).

As to claim 64, Eppenbach discloses a structure having an adjustable shape defined by connections between a second end **C** of a strut **47,63,69** and another structural element and a position of the resilient member **71** of a connector module (Figures 5 and 6).

As to claim 65, Eppenbach discloses a structure which is collapsible (Figure 5).

As to claim 66, Eppenbach discloses a structure having a strut **47,63,69** of a connector module having a telescoping member **69** (telescoping member **69** is telescopically received in cavity **59** of body **57**; Figures 3 and 4).

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As to claim 70, Eppenbach discloses a structure having a resilient member **71** accommodating axial motion (Figures 3 and 4).

As to claim 71, Eppenbach discloses a structure having a strut **47,63,69** having a telescoping member **69** (telescoping member **69** is telescopically received in cavity **59** of body **57**; Figures 3 and 4).

As to claim 74, Eppenbach discloses a structure having a resilient member **71** accommodating axial motion (Figures 3 and 4).

As to claim 75, Eppenbach discloses a structure having a resilient member **71** accommodating axial motion (Figures 3 and 4).

As to claim 80, Eppenbach discloses a connector module comprising:
a body **57**;

a resilient member **71** accommodating axial, translational (compression of spring **71**) and rotational motion (bending of spring **71**), the resilient member having a first end **A** and a second end **B**;

a telescoping strut **47,63,69** (telescoping member **69** is telescopically received in cavity **59** of body **57**) having a first end **63,69** connected to the second end of the resilient member and a second end **C**, the second end being connectable to another structural element (Figures 2-5).

As to claim 83, Eppenbach discloses a structure comprising a plurality of connector modules, each of the connector modules comprising:

a body **57**;

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a resilient member **71** accommodating axial, translational (compression of spring **71**) and rotational motion (bending of spring **71**), the resilient member having a first end **A** and a second end **B**;

a telescoping strut **47,63,69** (telescoping member **69** is telescopically received in cavity **59** of body **57**) having a first end **63,69** connected to the second end of the resilient member and a second end **C**, the second end being connectable to another structural element (Figures 2-5).

As to claim 84, Eppenbach discloses a structure assuming a plurality of shapes determined by relative positions of the resilient member **71** and the telescoping strut **47,63,69** of each of a plurality of connector modules (Figures 3 and 4).

As to claim 85, Eppenbach discloses a structure assuming a first shape in two dimensions and a second shape in three dimensions (Figures 5 and 6).

As to claim 86, Eppenbach discloses a structure assuming a first shape in two dimensions and a second shape in three dimensions (Figures 5 and 6).

As to claim 87, Eppenbach discloses a structure wherein a resilient member **71** of each of a plurality of connector modules is biased to cause the structure to assume a shape absent an external force (spring **71** is biased to an equilibrium state, holding strut member **69** within cavity **59** of body **57**).

As to claim 88, Eppenbach discloses a structure wherein a resilient member **71** of each of a plurality of connector modules is biased to cause the structure to assume a shape absent an external force (spring **71** is biased to an equilibrium state, holding strut member **69** within cavity **59** of body **57**).

Allowable Subject Matter

8. Claims 22-24, 33, 36, 37, 41-43, 45-47, 50-57, 60-63, 67-69, 72, 73 and 76-79 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

As to claim 22, Eppenbach fails to disclose a connector module having a body comprising a counter bore, a resilient member being inserted into the counter bore.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have counter bore, wherein a resilient member is inserted into the counter bore, as there is no motivation for making such modifications.

As to claim 26, Eppenbach fails to disclose a connector module comprising an actuator to extend and contract a telescoping member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have an actuator to extend and contract a telescoping member, as there is no motivation for making such modifications.

As to claim 29, Eppenbach fails to disclose a connector module comprising an actuator to adjust a position of a resilient member.

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It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have a actuator to adjust a position of a resilient member, as there is no motivation for making such modifications.

As to claim 30, Eppenbach fails to disclose a connector module comprising an actuator to adjust a position of a resilient member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have a actuator to adjust a position of a resilient member, as there is no motivation for making such modifications.

As to claim 36, Eppenbach fails to disclose a connector module comprising an actuator to extend and contract a telescoping member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have an actuator to extend and contract a telescoping member, as there is no motivation for making such modifications.

As to claim 41, Eppenbach fails to disclose a connector module having a body comprising a counter bore, the resilient member being inserted into the counter bore.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have counter bore, wherein a resilient member is inserted into the counter bore, as there is no motivation for making such modifications.

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As to claim 45, Eppenbach fails to disclose a connector module comprising an actuator to extend and contract a telescoping member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have an actuator to extend and contract a telescoping member, as there is no motivation for making such modifications.

As to claim 50, Eppenbach fails to disclose a connector module comprising an actuator to extend and contract a telescoping member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have an actuator to extend and contract a telescoping member, as there is no motivation for making such modifications.

As to claim 51, Eppenbach fails to disclose a connector module comprising an actuator to adjust a position of a resilient member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have a actuator to adjust a position of a resilient member, as there is no motivation for making such modifications.

As to claim 52, Eppenbach fails to disclose a connector module comprising an actuator to adjust a position of a resilient member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by

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Eppenbach to have a actuator to adjust a position of a resilient member, as there is no motivation for making such modifications.

As to claim 53, Eppenbach fails to disclose a connector module comprising an actuator to adjust a position of a resilient member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have a actuator to adjust a position of a resilient member, as there is no motivation for making such modifications.

As to claim 54, Eppenbach fails to disclose a connector module comprising an actuator to adjust a position of a resilient member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have a actuator to adjust a position of a resilient member, as there is no motivation for making such modifications.

As to claim 60, Eppenbach fails to disclose a structure comprising an actuator to extend and contract a telescoping member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a structure as disclosed by Eppenbach to have an actuator to extend and contract a telescoping member, as there is no motivation for making such modifications.

As to claim 61, Eppenbach fails to disclose a structure comprising an actuator to adjust a position of a resilient member.

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It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a structure as disclosed by Eppenbach to have a actuator to adjust a position of a resilient member, as there is no motivation for making such modifications.

As to claim 62, Eppenbach fails to disclose a connector module comprising an actuator to adjust a position of a resilient member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have a actuator to adjust a position of a resilient member, as there is no motivation for making such modifications.

As to claim 67, Eppenbach fails to disclose a structure comprising an actuator to extend and contract a telescoping member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a structure as disclosed by Eppenbach to have an actuator to extend and contract a telescoping member, as there is no motivation for making such modifications.

As to claim 69, Eppenbach fails to disclose a connector module comprising an actuator to adjust a position of a resilient member of a connector module.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have a actuator to adjust a position of a resilient member of a connector module, as there is no motivation for making such modifications.

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As to claim 72, Eppenbach fails to disclose a structure comprising an actuator to extend and contract a telescoping member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a structure as disclosed by Eppenbach to have an actuator to extend and contract a telescoping member, as there is no motivation for making such modifications.

As to claim 81, Eppenbach fails to disclose a connector module comprising an actuator to extend and contract a telescoping strut.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Eppenbach to have an actuator to extend and contract a telescoping strut, as there is no motivation for making such modifications.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (703)308-8591. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703)308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9326 for regular communications and (703)872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1114.

MPF

January 15, 2003


Lynne H. Browne
Supervisory Patent Examiner
Group Art Unit 3679